41

2812

Attorney Docket No. 0756-2433

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	)	Group Art Unit: 2812
Shunpei YAMAZAKI et al.	)	Examiner: S. Isaac
Serial No. 10/072,931	)	
Filed: February 12, 2002	)	
For: METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE	)	

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on September 18, 2003.

Rose Richard

RESPONSE

Honorable Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Official Action mailed June 18, 2003, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on April 5, 2002 and October 29, 2002.

Claims 1-80 are pending in the present application, of which claims 1-46, 48-50, 52, 54, 56-58, 60-62, and 64-80 have been withdrawn by the Examiner. Accordingly, claims 47, 51, 53, 55, 59 and 63 are currently elected, of which claim 47 is independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

With respect to claims 78-80 (added in the *Amendment* filed March 19, 2003), the Applicants disagree with the Examiner's withdrawal of the claims. The Applicants respectfully submit that claims 78-80 are generic to at least independent claims 1, 10, 46-48, 66 and 67 and thus claims 78-80 should be examined. In any event, it is

respectfully requested that the basis for the withdrawal of claims 78-80 be clarified and that the Examiner also provide further clarification of the basis for the restriction of the claims into eight species.

Paragraph 2 of the Official Action rejects claim 47 under 35 U.S.C. § 112, second paragraph, for indefiniteness asserting that there is no antecedent basis for the third layer semiconductor film. The Applicants respectfully submit that claim 47 does not recite "gettering the material for promoting crystallization into the third layer semiconductor film." The Applicants respectfully submit that claim 47 is definite. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 112 are in order and respectfully requested.

Paragraph 4 of the Official Action rejects claims 47, 51, 53, 55, 59 and 63 as obvious based on the combination of U.S. Patent No. 6,337,259 to Ueda et al. and U.S. Patent No. 6,436,745 to Gotou et al. The Applicants respectfully traverse the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. The Official Action concedes that Ueda does not teach "the step of forming a second semiconductor film over the barrier layer and gettering the material for promoting crystallization into the third semiconductor film" (page 3, Paper No. 15). The Official Action asserts that Gotou teaches the above-referenced feature and that it would have been obvious to combine Ueda and Gotou. The Applicants respectfully disagree.

As noted above, claim 47 does not recite a third semiconductor film. Claim 47 recites forming a second semiconductor film over the barrier layer, adding an inert gas element to an upper layer of the second semiconductor film, and gettering the material for promoting crystallization into the upper layer of the second semiconductor film. Ueda and Gotou, either alone or in combination, do not teach or suggest all the features of independent claim 47.

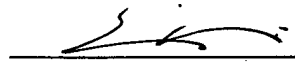
Specifically, Gotou does not teach forming a second semiconductor film over the barrier layer, because the a-Si film 104 (second semiconductor film) of Gotou is formed on a CGS film 103 (first semiconductor film) as shown in Fig. 1E.

Further, it appears that Ueda and Gotou do not teach or suggest the step of adding an inert gas element to an upper layer of the second semiconductor film.

Since Ueda and Gotou do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,



Eric J. Robinson
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.
PMB 955
21010 Southbank Street
Potomac Falls, Virginia 20165
(571) 434-6789